REMARKS/ARGUMENTS

These remarks are submitted in response to the final Office Action dated September 21, 2006 (Office Action). This response is file concurrently with a Request for Continued Examination (RCE). The Examiner is expressly authorized to charge all fees due to Deposit Account No. 50-0951.

In the Office Action, Claims 1-28 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Published Patent Application No. 2002/0010715 to Chinn, *et al.* (Chinn), in view of U.S. Patent No. 6,275,378 to Schuba, *et al.* (Schuba). Additionally, Claims 27 and 28 were rejected at pages 3-4 of the Office Action under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Applicants have amended independent Claims 1, 14, and 27 to further emphasize certain aspects of the invention. Applicants have cancelled Claims 2, 3, 15, and 16. The claim amendments, as discussed below, are fully supported throughout the Specification. No new matter has been introduced through the claim amendments.

Aspects Of Applicants' Invention

It may be useful to reiterate certain aspects of Applicants' invention prior to addressing the cited references. One embodiment of the invention, typified by amended Claim 1, is a method of providing help within an interactive voice response application executed by an interactive voice response system.

The method can include determining an interactive voice response event corresponding to a request for help. The method can further include classifying the event as a default help request if the event is a no-match event or a time-out event occurs, and classifying the event as a user initiated help request if the event is an explicit, application-recognizable request for help. Specifically, a no-match event occurs when the event is not associated with a valid option provided to the user by the application. (See, e.g., Specification, p. 5., paragraph [0012], lines 3-4; see also p. 10, paragraph [0026], lines 3-

5.) A time-out event occurs if a user fails to respond to a system prompt within a predetermined duration. (See, e.g., Specification, p. 5., paragraph [0012], lines 5-6; see also p. 10, paragraph [0026], lines 6-8.)

According to the method, a time for receiving user input can be set to a default value if the event is classified as a default help request. Conversely, if the event is classified as a user initiated help request, the time for receiving user input can be set to a value *less* than the default value. The interactive voice response application can execute a programmatic action upon expiration of the time for receiving user input.

The Claims Define Over The Prior Art

Claims 1, 14, and 27

Independent Claims 1, 14, and 27 were each rejected as being unpatentable over Chinn in view of Schuba. Chinn is directed to a system and method of Web browsing using a Web-enabled "limited" display device or "voice commands." (See paragraph [0006]; see also Abstract.) Schuba, by contrast, is directed to enhancing security within the context of a data communications network. (See, e.g., Col. 1, lines 13-17, and lines 57-60.) In particular, Schuba involves detecting and classifying messages comprising network-distributed Transmission Control Protocol (TCP) packets. Schuba's intent detecting and classifying the messages is explicitly to defend against denial-of-service attacks instigated over a data communications network.

Applicants respectfully submit that neither Chinn nor Schuba, alone or in combination, teaches or suggests every feature of Applicants' invention. For example, neither of the cited references teaches or suggests distinguishing between events that are characterized as default help requests versus those events that are characterized as explicit user requests for help. Accordingly, neither Chinn nor Schuba teaches or

suggests providing help to users of an interactive voice response application based on this distinction.

Chinn does not distinguish between default help requests and user-initiated help requests. Chinn's failure to make this distinction is underscored by the fact that Chinn treats a recognized user request and an unrecognized user request identically:

> "The help counter keeps track of the number of times help messages are played for a node currently being visited. A help message is usually provided to the user in case the system does not recognize the user's request or at the user's request. Thus, the help counter is incremented until the system successfully moves to the next node or the session ends. If the system browses that node again at a later time, then the counter would be reset, at step 1305." (p. 12, paragraph [0143].) (Emphasis supplied.)

According to Applicants' invention if a user's request is not recognized, a no-match event is deemed to have occurred. Such an event corresponds to a default help request, according to Applicants' invention. Chinn, by contrast, does not make any such distinction. Accordingly, Chinn treats the recognized user request the same as a request that the system does not recognize.

In another portion, cited at page 5 of the Office Action, Chinn distinguishes between an "explicit" system prompt and one that provides a user with a "list of choices:"

> "Once a greeting has been built by the system, then the system moves to step 1320 to determine whether an explicit prompt is included in the routing node. A prompt is typically provided to the user to elicit a response. An explicit prompt is played verbatim by the system. For example, an explicit prompt for Routing Node 1 could be "What city's weather are you

> checking?" Alternatively, in some embodiments of the invention, a prompt may provide a user with a list of choices from which to choose. For example, the following prompt may be provided: "Choose weather for Los Angeles, New York, or Dallas." If an explicit prompt is not included in the routing node, then at step 1325, the system builds a prompt based on keywords included in the routing node. The prompt built by the system could be, for example, "What city, please?" or "Choose weather for Los Angeles, New York, or Dallas." In certain embodiment, the manner in which prompts are built are based on the attributes and properties defined in the style sheet." (p. 12, paragraph [0148].)

Elsewhere, in a portion also cited at page 5 of the Office Action, Chinn describes a system response to a user's invoking a "help command:"

> "FIG. 13 is a flow diagram of an exemplary method 1600 for providing a user with assistance, according to an embodiment of the invention. Method 1600 may correspond to one aspect of operation for voice browsing system 10. A user, while using the system, can request for help at any point during navigation. When a user requests assistance by invoking the help command (e.g., by saying "help"), then at step 1605 the help counter N is incremented. At step 1610, the system retrieves the label for the node currently visited by the user. The node label is associated, in one or more embodiments, with the content of the node and is used to identify that node. The label can be a keyword included or associated with the node, for example." (p. 15, paragraph [0175].)

Applicants respectfully submit, however, that neither Chinn's distinction between explicit and non-explicit prompts, nor Chinn's provision of help commands, provides any basis for distinguishing between an event characterized as a default help request and an event characterized as a user-initiated help request.

More particularly, Chinn does not classify an event as a default help request if either a no-match event or a time-out event occurs, while classifying an event as a user-initiated help request if the event is a request for help and not some other type of request, as recited in amended Claims 1, 14, and 27. As explicitly recited in the claims a default help request occurs when either a no-match event or a time-out event occurs, according Applicants' invention. The no-match event occurs when an event does not correspond to a user option provided by the application, whereas the time-out event occurs if a user fails to respond to an application prompt within a predetermined duration of time. By contrast, a user-initiated help request is an explicit, recognized request other than a non-help request. Chin fails to make any of these distinctions, and accordingly, fails to treat the distinct events differently. Instead, as already noted, Chinn treats a no-match event and a recognized request event identically. (See p. 12, paragraph [0143].)

One aspect of Applicants' invention is the recognition of the source of a common problem that arises with the use of interactive response applications, namely, that the ordinary user is helped if given more time to provide input after receiving a response to a default help request, and if given relatively less time to provide input after receiving a response to a user-initiated help request:

> "users that receive help by default generally require a delay period of between six and eight seconds to digest the audibly presented options and to input their selection. In contrast, users that have explicitly selected help, generally require a delay period of three seconds or less to input a desired help option. Additionally, users that have explicitly requested help are less

> confused when presented with additional help options after a pause than users that received the initial help options by default. For the above reasons, it can be beneficial to automatically present a comprehensive second-level menu of help after pausing for a relatively short time-out period whenever the first-level help menu has been explicitly selected." (Specification, p. 5, paragraph [0011].)

This recognition of the source of a problem is itself an inventive aspect of Applicants' invention that warrants consideration. See *Eibel Process Co. v. Minnesota and Ontario Paper Co.*, 261 U.S. 45 (1923). More fundamentally, however, Applicants' invention encompasses specific features not contemplated by the cited references. Chinn's failure to distinguish between default help requests and user-initiated help requests, precludes Chinn's classifying an event as either a default help request or a user-initiated help request.

In one portion cited in the Office Action, Chinn describes setting a "timeout counter." (p. 12, paragraph [0144], lines 1-3.) Chinn's timeout counter, however, "keeps track of the number of times the system does not receive or recognize a user request." Although Chinn further describes that the system "allows a user to submit a request or provide a response to a prompt within a certain number of seconds," Chinn does not provide different times for responding depending on whether an event is a default help request – that is, a failure to recognize the user's response or a failure of the user to input a response – or is a user-initiated help request:

> A timeout counter keeps track of the number of times the system does not receive or recognize a user request while visiting the current node. In one or more embodiments, the system allows the user to submit a request or provide a response to a prompt within a certain number of seconds. If no

> request is submitted by the user, or if the delay in providing the request is longer than the allotted threshold, then the system plays a timeout message and increments the timeout counter. The timeout counter is incremented for the current node until the system successfully moves to the next node or the session ends. If the system browses that node again at a later time, then the counter would be reset at step 1305. (p. 12, paragraph [0144].)

The quoted language describes a system action that is taken if the user fails to provide *either* a system-recognizable response or no response at all. The events are, respectively, a no-match event and a time-out event. Chinn says nothing about treating both such events as a default help request that is distinguishable from an explicit, user-initiated help request. The fact that the timeout counter is incremented for a time-out event as well as a no-match event, suggests nothing about setting different times for the user to respond depending on whether the response is classified as a default help request or a user-initiated help request. Indeed, nothing in this portion of Chinn addresses explicit help requests submitted by a user.

Chinn, in another portion cited in the Office Action, describes changing messages that are provided to a user according to the "value of the timeout counter," but nothing suggests setting different times for a user to respond depending on whether an event is a default help request – either a failure to recognize the user's response or a failure of the user to input a response – or is a user-initiated help request:

> "FIG. 14 is a flow diagram of an exemplary method 1700 for recognizing user requests. Method 1700 may correspond to one aspect of operation for voice browsing system 10. After the system provides the user with a prompt, then at step 1705 the system listens for a user response to that prompt. In certain embodiments, the system may also be implemented to

listen for a user request even before or while a prompt or a greeting is being played. If the system does not receive a user response or request, at step 1710 the system determines whether a timeout condition has been met.

"The timeout condition, in one embodiment, is dependent on the amount of time passed before the system recognizes that a request has been submitted by the user. For example, if 5 seconds have passed before a user request is received, then at step 1712 a timeout message is provided to the user, indicating the reason for the timeout. An exemplary timeout message may provide: "No request received." As discussed earlier, when a node is visited, the counters associated with that node, including the timeout counter, are reset. When a timeout message is played, the timeout counter is incremented by a certain integer value, such as 1.

"The system tracks the value of the timeout counter until it reaches a threshold value. Prior to reaching the threshold value, in some embodiments, the system handles a timeout condition by replaying the prompt for the visited node again and waiting for a user response. Based on the value of the timeout counter, various timeout messages and or options may be provided to the user. For example, in some embodiments, as the value of the timeout counter increases, the messages provide more helpful information and instructions guiding the user on how to proceed. Once the timeout threshold is reached, then the system plays a last resort timeout message and returns the user to the main menu, for example." (p. 16, paragraphs [0183]-[0186].)

Each of the events described in the quoted portion of Chinn pertains to either the user's failure to provide a system-recognizable response or any response at all. Again, both such events are classified according to Applicants invention as help default requests. Nothing is described in the quoted language that pertains to user-initiated help requests.

It follows that Chinn does not teach or suggest setting a default time for receiving input if an event is classified as a default help request and setting less time for providing input if an event is classified as a user-initiated help request. Indeed, as explicitly noted at page 6 of the Office Action, "Chinn does not disclose setting the time to a value less than the default value." More fundamentally, however, Chinn by failing to classify an event as either a default help request or a user-initiated help request, is unable to set a time to a default value after the former event and set a time less than the default value after the latter event.

***There is no teaching, suggestion, or motivation for combining* Chinn *and* Schuba**

Schuba is cited at page 6 of the Office Action as disclosing merely the setting of a time to a value less than a default value. It is further stated that

> "It would have been obvious to one of ordinary skill in the art, having the teachings of Chinn and Schuba before him at the time the invention was made, to modify setting a time as taught by Chinn to include setting a time to less than the default as taught by Schuba, because Chinn teaches setting a timeout period for [a] user response (p. 12, para. 144; p. 16, para. 183-185) and Schuba teaches setting a timeout period to a value less than the default (col. 10, lines 25-28) so that the timeout period taught by Chinn could be set to a value less than the default." (Office Action, p. 6.)

Applicants respectfully submit that this merely states that Chinn teaches one thing ("setting a timeout period to a value less than the default") and Schuba teaches another ("setting a timeout period to a value less than the default") so that when added together they yield Applicants' invention. What is not stated is any teaching, suggestion, or motivation that would lead one to combine the references in the first place.

For example, neither the references themselves nor the prior art generally suggests anything about setting one time for a user to respond following a default help request, but setting another time for a user to respond following an explicit help request. Even if Schuba teaches "setting a timeout period to a value less than the default," that suggests nothing about *which* event – the default help request or the user-initiated help request – should be associated with a shorter time interval.

Even when combined,* Chinn *and* Schuba *fail to teach every aspect of the invention

Neither Chinn nor Schuba classify an event as either a default help request or a user-initiated help request. Thus it is logically impossible to infer from either that it is more advantageous to afford more time for a user to respond after a default help request and less time after an explicit help request. Neither Chinn nor Schuba teach that one time should be set for a default help request (i.e., a single class: either a no-match or a time-out event) and a shorter time set for a user-initiated help request. Applicants respectfully submit that, whereas nothing in the prior art suggests *which* event – the default help request or the user-initiated help request – should be associated with a shorter time interval, to assert that the references teach or suggest this feature amounts to an improper hindsight reconstruction based upon Applicants' own invention.

Schuba merely describes reducing a timeout to prevent a denial of service attack in the context of data communications networking. Chinn describes user requests that are help requests. Chinn also describes user requests that are unrecognizable to a system; that is, no-match events. And Chinn describes setting a time-out that leads to an

automatic response if a user provides no response within a prescribed time interval; that is, an automatic response to a time-out event. Neither reference, however, teaches or suggests that both the no-match event as well as the time-out event should be classified as a single-class event: a default user help request. By not doing so, both references fail distinguish between this class of default events and an explicit user-initiated help request. Therefore, neither reference teaches, as Applicants' invention does, the setting of one time value for the default help request (regardless of whether it is a no-match or time-out event) and setting a lower time value for a user-initiated request.

Accordingly, even when Chinn is combined with Schuba, the combination still fails to teach the features recited in independent Claims 1, 14, and 27, as amended. Applicants respectfully submit, therefore, that each of Claims 1, 14, and 27, as well as the remaining claims dependent thereon, define over the prior art.

Claims 5, 18, and 28

For similar reasons, neither Chinn nor Schuba, alone or in combination, teaches or suggests every feature recited in independent Claims 5, 18, and 28. Chinn does not provide even a remote suggestion of treating an explicit user request for help differently than all other user inputs or responses. Indeed, nothing in Chinn suggests any recognition that explicit user requests for help are unique from other system inputs or responses provided by a user. As already noted, moreover, neither Schuba's reduction of a timeout interval in the context of data communications networking to avoid denial of service attacks nor the prior art generally suggest which events – an explicit user request for help or other user inputs or responses – should be associated with a reduced time interval. Accordingly, Applicants respectfully submit that the references do not teach or suggest every feature recited in Claims 5, 18, and 28, and that the claims as well as those dependent thereon define over the prior art.

Claims 27 and 28

At pages 2-3 of the Office Action, Claims 27 and 28 were rejected as being directed to non-statutory subject matter because "the language of the claims raises a question as to whether the claimed systems are directed merely to an abstract idea that is not tied to . . . a machine which would result in a practical application producing a concrete, useful, and tangible result." Applicants respectfully point out, however, that the claims recite "means for" producing the claimed results. Accordingly, the claims are directed to a "machine." The issue was explicitly addressed by the Federal Circuit in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.,* 149 F. 3d 1368 (1998), where the court ruled that the lower court erred by construing such claims as being drawn to a "process," stating that when "properly construed in accordance with § 112, ¶ 6, [such a claim] is directed to a machine." 149 F. 3d, at 1371. In the present case, the means for language must be viewed in terms of the supporting structure, the system, described in the written description. (See, e.g., Specification, paragraph [0020].)

Moreover, regardless of whether the claims are constructed as being drawn to a machine or a process, the inventions described in the respective claims indeed yield concrete, useful, and tangible results. Both claims, for example, include means for setting a time as well as means for providing audible messages based on determined outcomes. Applicants respectfully submit that these results are no less concrete or tangible than, for example, enhancing a message record associated with a long-distance telephone call by adding a primary interexchange carrier indicator. See AT&T Corp. v. Excel Communications, Inc., 172 F. 3d 1352 (Fed. Cir. 1999).

Applicants respectfully submit, therefore, that Claims 27 and 28 are indeed drawn to statutory subject matter. Applicants further respectfully submit that, for the reasons stated above, the claims further define over the prior art.

CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

Date: November 20, 2006

Gregory A. Nelson, Registration No. 30,577
Richard A. Hinson, Registration No. 47,652
AKERMAN SENTERFITT
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000